

37934

S/079/61, 071, 010/005 010

D227/D304

Synthesis of di(methylindenyl)iron

extracted with ether. On concentration and cooling of the extract a black colored solid crystallized out which had a m.pt. of 107-108°C. In the second method, 1-methyldiene was added to n-butyllithium in ether and the mixture heated on a water bath until its color changed to deep red. After cooling to 16°C  $\text{FeCl}_2$  was added and the mixture refluxed for 5 hrs. The reaction product was then concentrated and cooled. A black solid separated out after 12 hrs. About 1/4 of the solid was washed with water, 10% HCl, water and ether, and then recrystallized from ether. Further purification was conducted by distillation at 70°C, 7 mm and the m.pt. of the product was 107-108°C. In the third method,  $\text{FeCl}_2$  was added to 1-methyl-indene solution in diethylamine and the mixture stirred for 18 hrs. The residue after steam distillation of the product was dried and redistilled to yield a product m.pt. 107-108°C. The investigations showed that di(methylindenyl)iron is unstable in organic solvents in the presence of air except in ether at low temperatures. It is sufficiently stable in the dry state and is a

Card 2, 4

27908  
S/079/61/031/010/005/010  
B227/B304

Synthesis of di(methylindenyl)iron

black crystalline solid m.pt. 107-109°C. There are 13 references: 7 Soviet-bloc and 6 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: P. Pouson, G. Wilkingson, J. Am. Chem. Soc. 76, 2024 (1954); P. Pouson, Quart. Rev. 9, 391 (1955); US Patent 2,719,074, H. Gilman, J. Biel, C. Brannen, M. Bullock, G. Dunn, L. Miller, J. Am. Chem. Soc. 71, 1499 (1949).

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology im. D.I. Mendeleyev)

SUBMITTED: December 24, 1960

X

Card 3/3

S/079/63/033/001/013/023  
D204/D307

AUTHORS: Sokolova, Ye. B., Shebanova, M. P. and Chou Heng-chin

TITLE: Synthesis of ferrocene analogs

PERIODICAL: Zhurnal obshchey khimii, v. 33, no. 1, 1963, 217-220

TEXT: A continuation of earlier work (ZhOKH, 31, 3379 (1961)) in which di(methylindenyl) iron was prepared by condensing 1-methylindenyllithium with  $\text{FeCl}_2$ . Condensations of 3-ethyl-, 3-butyl-, 3-allyl-, 3-phenyl-, and 3-benzyl-indenyllithium with  $\text{FeCl}_2$  were studied in the present work. In a typical preparation ethereal alkylindene was added, with stirring, to  $n\text{-BuLi}$ , and the mixture was stirred for 2 hours on a water bath to form the Li derivative.  $\text{FeCl}_2$  (obtained by the reduction of  $\text{FeCl}_3$  with  $\text{PhCl}$ ) was then added in portions to the cooled solution and the reaction mixture was stirred, first for 1 hour at room temperature, then for 2 hours at  $100^\circ\text{C}$ . The mixture was then cooled and the ethereal filtrate was

Card 1/2

Synthesis of ferrocene ...

S/079/63/033/001/013/023  
D204/D307

poured into ice water acidified with HCl; the organic layer was washed with 5% aq. NaOH, and with H<sub>2</sub>O, and was then dried over MgSO<sub>4</sub>. Ether was then evaporated off, unreacted alkylindene was removed with superheated steam (200°C) and the residue was distilled, at 2 - 5 mm Hg, under N<sub>2</sub>. Di-(alkylindenyl) iron analogs of ferrocene were obtained; the violet-black ethylinenyl- and allylinenyl derivatives were not, however, fully characterized owing to the difficulty of preparing sufficiently pure starting alkylindenyles. Di(butylindenyl)-, di(phenylinenyl)-, and di(benzylindenyl) irons were obtained in 10 - 20% yields. The butyl derivative was violet-black, the remaining 2 were black. The benzyl derivative had a m.p. of 131 - 133°C. There are 2 tables.

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut imeni D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: February 2, 1962

Card 2/2

PETROV, A.D.; SOKOLOVA, YE.B.; SHEBANOVA, M.P.; GOLOVINA, N.I.

Addition of silicon hydrides to dimethylallylferrocenylsilane in  
the presence of H<sub>2</sub>PtCl<sub>6</sub>. Dokl. AN SSSR 152 no.5:1118-1121  
0 '63. (MTRA 16:12)

1. Moskovskiy khimiko-tehnologicheskiy institut im. D.I.Mendeleyeva.
2. Chlen-korrespondent AN SSSR (for Petrov).

ACCESSION NR: APL012284

S/0070/64/009/001/0116/0117

AUTHORS: Zhuravlev, N. N.; Stepanova, A. A.; Shebatinov, M. P.

TITLE: X-ray determination of the coefficients of thermal expansion for monosulfides of La, Ce, Pr, and Nd

SOURCE: Kristallografiya, v. 9, no. 1, 1964, 116-117

TOPIC TAGS: thermal expansion, thermal expansion coefficient, rare earth monosulfide, x ray determination, semiconductor, metallic conductivity

ABSTRACT: The crystals investigated are cubic and have the structure of NaCl. The lattice dimensions, density, interatomic distances, atomic diameter, and thermal expansion for the various sulfides are shown in Table 1 of the Enclosure. To obtain the coefficient of thermal expansion the authors took x-ray photographs in a vacuum at various temperatures (from room temperature to 400°C), using Cu radiation. They also computed an index  $\Delta$ , proposed by L. D. Dudkin (Nekotorye zakonomernosti obrazovaniya poluprovodnikovykh faz v sistemakh s perekhodnymi metallami. V sb. "Vyssokotemperaturnye metallokeramicheskiye materialy." Izd-vo AN UkrSSR, Kiyev, 1962, 87), which characterizes the type of conductivity.

Card 1/3

ACCESSION NR: AP4012284

ity. If  $\Delta < 14.5\%$ , the compound should have metallic conductivity. If  $\Delta > 14.5\%$ , then, under certain conditions, the compound may act as a semiconductor. All the studied compounds have  $\Delta$  less than 14.5%. Orig. art. has: 1 table.

ASSOCIATION: Moskovskiy gosudarstvenny universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 15Apr63

DATE ACQ: 19Feb64

ENCL: 01

SUB CODE: PH

NO REF Sov: 006

OTHER: 001

Card 2/3

SOKOLOVA, Ye.B.; SHEBANOVA, M.P.; CHZHOU KHEN-TSZIN' [Chou Heng-chin];  
PISAREVA, S.A.

Use of fulvenes for the synthesis of homologs and analogs of  
ferrocene. Zhur. ob. khim. 34 no.8:2693-2696 Ag '64.  
(MIRA 17:9)

SOKOLOVA, Ye.B.; SHEBAKOVA, M.P.; TAN TSZUN'-TSZE [T'ang Tsun-chieh];  
TROYANOVSKAYA, Ye.A.

Condensation of an allyl-type bromide of the C<sub>7</sub>H<sub>13</sub>Br composition  
with carbonyl compounds and Grignard reagents. Zhur. ob. khim. 34  
no.9:3085-3087 S '64. (MIRA 17:11)

SHEBANOV, V.A.

Urolithiasis in pregnancy. Urologia no.3:20-22 '62.  
(MIRA 15:5)

1. Iz akushersko-ginekologicheskogo otdeleniya (zav. - D.M.  
Kazarnovskaya, nauchnyy rukovoditel' - prof. G.Ye. Gofman)  
TSentral'noy klinicheskoy bol'nitsy imeni N.A. Semashko Ministerstva  
putej soobshcheniya.  
(CALCULI, URINARY) (PREGNANCY, COMPLICATIONS OF)

GONSOVSKAYA, T.B.; SHEBANOVA, Ye.A.

Application of brittle laqueur coatings for the determination of  
strains in machine parts. [Nauch. trudy] ENIKMASHa 1:222-226 '59.  
(MIRA 14:1)

(Machine—Testing)  
(Strains and stresses—Testing)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548930007-4

SHEBAROV, I.L., inzh.

Transportation. Mekh. i avtom. proizv. 17 no.6:17-22 Je '63.  
(MIRA 16:7)  
(Materials handling)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548930007-4"

SHEBARSHIN, M.N. (Kemerovskaya obl.)

about the notes published in no.5 of "Matematika v shkole" for  
1959. Mat.v shkole no.4:71-72 Jl-Ag '60. (MIRA 13:9)  
(Geometry)

*Shefford ye 4.*

PAGE 1 DOCUMENTATION

SOV/5713

Departamental'nyy nauchno-issledovatel'stviy institut gumenchno-prezervirovaniya  
stroyotekhniki

Izobrazheniya i recherye mashin gumenchno-prezervirovaniya protivotveta. (Studia s  
sodai i vychislenniiami po rasklyucheniyu i strelkovaniiu) (Nauchnyi zhurnal, 1959,  
ser. 1, no. 1, p. 25). (Series: Issledovaniye i issledovaniye 1, stranitsa 1.) Karta slip inserted. 8,000 copies  
printed.

Sponsoring Agency: USSR. Gomudarstvennyy komitet po avtomobilistiki i mashino-  
stroeniyu.

Editorial Board: A. I. Zol't'yev, Candidate of Technical Sciences; E. D. Publishing House:

E. S. Stepanchenko, Tech. Ed.; T. P. Solntseva, Managing Ed.; Editorial Board:  
on Heavy Machine Building (Mechika); S. Ya. Gol'dvin, Engineer; Editorial Scientific Ed.  
G. P. Bol'shakov, Engineer; V. P. Vysotskiy, Candidate of Technical Sciences;

V. N. Vasili'yev, Engineer; I. B. Mar'yavskiy, Candidate of Technical Sciences;  
A. P. Yermakov, Engineer; P. V. Novikov, Engineer; P. V. Roshchupkin, Engineer;  
A. V. Malyshchikov, Engineer; L. V. Rubanenko, V. M.

Danilov, P. D. Chumakov, Candidate of Technical Sciences; and A. I. Zol't'yev.

Purpose: The book is intended for technical personnel and scientific workers  
in the metal-forming industry.

Coverage: This collection of 12 articles deals with current research on metal-  
forming operations, the design and operation of press-forging machinery and  
processes and force analysis in punching and blanking operations. 10 person-  
alities are mentioned. References follow each article.

## TABLE OF CONTENTS:

Zol't'yev, A. I., and Yu. A. Stepanchenko, Use of Brittle Lacquer Coat-  
ings as Strain Indicators for Machine Elements. 222  
The article deals with a number of lacquers and oxide and resin coat-  
ings used in the stress analysis of parts for metal-forming machinery.  
A resin coating based on diisobutylene is particularly recommended.  
Surveys of the regimes of coating of test pieces with 5 different  
strains-indicating agents, including the recommended one, are given in  
a table.

Tolokov, V. M., and A. B. Turzhikov, [Engines and] Investigation Into  
the Expediency of Manufacturing Welded Frames and Beds for Industrial  
Presses. 227  
The authors compare and analyze some economic indices for a number  
of cast and welded frames of 12 types of industrial presses,  
manufactured by the two Voronezh plants and the Barnaul plant.  
Specifications of the presses are given. The authors favor welding  
over casting because of cost considerations.

AVAILABLE: Library of Congress

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(4)  
AC/PW/PAI  
7-20-50

CARD 10/10

SHKOLNIK, Leon., Red.

[Handwriting analysis of participants in a  
seminar] Prilozhenie i primenenie strukchetekhniki pisma;  
materialy seminara. Moscow, 1961. 154 p.

(Handwriting)

1. Moscow. Vsesoziial'nyy institut naukno-tehnicheskoy infor-  
matzii bumazhnoy i drevdokumentovyyuzhnoy i vys-  
yashchennosti.

MARKOVA, A.N.; SHEBARSHINA, N.N.

Methods for calculating the transportation of petroleum.

Transp. i khran. nefti i nefteprod. no.5:23-26 '65.

(MIRA 18:10)

1. Institut kompleksnykh transportnykh problem.

TIMOFEEV, N.S., SHEBASHEVICH, Yu.I.

Introduce on a large scale gas turbine drives in oil production operations. Neft. khoz. 38 no.3:1-10 Mr '60. (MIRA 13:7)  
(Gas turbines) (Gas, Natural)

SHEBASHOV, Yu.A.

Designing main beams, taking in consideration the elastic distribution of loads. Nauch.dokl.vys.shkoly; stroi. no.2:143-148 '59.  
(MIRA 13:4)

1. Rekomendovana kafedroy mosty Leningradskogo inzhenerno-stroitel'nogo instituta.  
(Bridges, Designed)

SHEBASHOV, Yu. A.

Cand Tech Sci - (diss) "Calculations for girder span bridge designs taking into account their spatial performance." Leningrad, 1961. 10 pp; (Leningrad Order of Lenin Inst of Railroad Transport Engineers imeni Academician V. N. Obraztsov); 150 copies; price not given; (KL, 5-61 sup, 195)

SHEBATIN, Yu. I.

Setting of station marks by manual drilling. Geod. i kart. no.4:58-  
59 Ap '60. (MIRA 13:8)  
(Triangulation) (Boring)

ALL INFORMATION CONTAINED

HEREIN IS UNCLASSIFIED  
DATE 2-27-2007 BY SP/CDR JESSE L. HARRIS

SP/CDR JESSE L. HARRIS (Liaison General Supply, Inc., DC, USA).

SHEBEKA, V.F., kandydat tekhnichnykh naук.

Special aspects of the temperature of peat-bog soils. Vestsi AN  
BSSR Ser.biiial.nav.no.2:29-45 '56. (MLRA 10:1)  
(Peat soils) (Soil temperature)

SHEBEKA, V.F., kandidat nauk; BRAGILEUSKAYA, E.A.

Certain problems in heat and radiation balances of swamp surfaces.  
Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.4:51-70 '56. (MLRA 10:6)  
(Swamps) (Radiation)

FISHCHIKOV, S.P.; KULSKII, A.A.; SIBIRSKII, A.V. (Shevchenko, O.V.)

Equilibrium form of light nuclei. Ukr. fiz. zhurn. 3 no.11:1165-1192  
N '64. (CERN 17:9)

I. Fiziko-tehnicheskiy institut AN UkrSSR, Khar'kov.

ACC NN: AP7005441

SOURCE CODE: UR/0367/66/004/003/0482/0485

INOPIN, YE. V.; SHEBEKO, A. V.

ORG: none

"Inelastic Diffraction Scattering of Particles with Excitation  
of Monopole Nuclear Oscillations"

Moscow; Yadernaya Fizika; September, 1966; pp 482-485

TOPIC TAGS: inelastic scattering, scattering cross section

Abstract: The method of complex angular momenta is used to calculate the cross-sections for the inelastic diffraction scattering of particles leading to the excitation of monopole nuclear oscillations. A comparison of the formulae with previous calculations, based on the distorted wave method, made it possible to determine the limits of the applicability of this method. The distorted wave method can be applied under the condition that the inelastic scattering cross-sections are considerably smaller than the elastic scattering cross-section.

Orig. art. has: 17 formulas. [JPRS: 38,764]

SUB CODE: 20 / SUBM DATE: 04Dec65 / ORIG REF: 002 / OTH REF: 001

Card 1/1

L 17654-66 EWT(1)

ACC NR: AP6002723

SOURCE CODE: UR/0056/65/049/006/1824/1830

AUTHORS: Inopin, Ye. V.; Tishchenko, B. I.; Shebeko, A. V. 28

ORG: Physicotechnical Institute, Academy of Sciences UkrSSR 27  
(Fiziko-tehnicheskiy institut Akademii nauk UkrSSR) B

TITLE: Description of inelastic diffraction scattering by the complex angular momentum method 21, 44, 55

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49,  
no. 6, 1965, 1824-1830

TOPIC TAGS: particle diffraction, inelastic scattering, scattering cross section, alpha particle reactions

ABSTRACT: A new method, which has recently been proposed by one of the authors (Inopin, ZhETF v. 48, 1620, 1965) for the description of elastic diffraction scattering by composite nuclei, and which is shown in a companion paper (Inopin, with A. A. Kresnin ZhETF v. 49, 1796, 1965, ACC NR: AP6002720) to be in agreement with the available experimental data, is used to obtain a unified description of elastic

Card 1/2

L 17654-66

ACC NR: AP6002723

and inelastic scattering of spinless particles. A simple analytic expression for the inelastic scattering cross section is derived on the basis of the complex angular momentum method. The S-matrix parameters introduced in the earlier papers are used for the inelastic scattering in this paper. The expression obtained yields the well known Blair phase rule, for which a more rigorous proof is obtained in this paper than in the past. The results are compared with experiments on the scattering of  $\alpha$  particles by five different nuclei ( $Mg^{24}$ ,  $Ti^{48}$ ,  $Ni^{58}$ ,  $Zn^{66}$ ,  $Sr^{88}$ ), and the comparison indicates satisfactory qualitative agreement between the theory and the experimental data. The authors thank N. Austern and J. S. Blair for sending a preprint of their paper before publication, and to A. A. Kresnin for valuable discussions. Orig. art. has: 5 figures, 16 formulas and 3 tables.

SUB CODE: 20/ SUBM DATE: 02Jun65/ ORIG REF: 004/ OTH REF: 012

Card 2/2 nst

ACCESSION NUMBER:

SOURCE CODE: UR/00513RC/050/000/1674-1681

475

AUTHOR: Tjarchenko, B. I.; Shebeko, A. V.

45

B

ORG: Physicotechnical Institute, Academy of Sciences, Ukrainian SSR (Fiziko-tehnicheskiy institut Akademii nauk Ukrainskoy SSR)

TITLE: Contribution to the theory of diffraction scattering of particles by nuclei  
based on the method of complex angular moments

SOURCE: Zh eksper i teor fiz, v. 50, no. 6, 1966, 1674-1681

TOPIC TAGS: particle diffraction, Coulomb scattering, S matrix, elastic scattering,  
scattering cross section

ABSTRACT: Expressions for elastic and inelastic diffraction scattering of particles  
by nuclei, involving the excitation of collective states, have been obtained by the  
method of complex angular moments. It has been assumed that the modulus and the  
phase shift of the S matrix may possess poles in the complex angular momentum  
plane. It has been shown that the presence of poles in the S matrix phase near the

Card 1/2

L 4.3691-66

ACC NR: AP6020225

poles of its modulus and the Coulomb interaction explains a number of interesting features of the behavior of the differential scattering cross sections, such as the decrease of oscillation amplitudes of the cross sections with growth of the nuclear charge, the possibility of inelastic scattering cross-section oscillations when oscillations are absent in elastic scattering, and the decrease of oscillation amplitude with the growth of the scattering angle. It has been shown that "competition" between the Coulomb and nuclear phases can explain the "cross-section drop" (the presence of one or two cross-section minima which are much lower than the adjoining ones). It has been mentioned that the value  $\delta(l_b)$ , where  $l_b$  is the boundary nuclear angular momentum, can readily be estimated. The authors thank Ye. V. Inopin for his interest in this work and for a number of valuable discussions. Orig. art. has: 33 formulas. [Based on authors' abstract] [NT]

SUB CODE: 20/ SUBM DATE: 28Jan66/ ORIG REF: 004/ OTH REF: 006/

Card 2/2 *2gm*

SHEREKO, L.A.

SHEREKO, L.A., Cand Tech Sci -- (diss) "On the problem of the study of the mechanical drives of superchargers of internal combustion engines." Khar'kov, 1958. 12 pp (Min of Higher Education UkrSSR. Khar'kov Polytech Inst im V.I.Lenin). 100 copies (KL, 20-58, 99)

LEPOV, S.I.; REZNIK, V., transl. from: "Soviet Welding," v. 1,  
Issue 1, 1974.

[Equipment and technology of arc welding; laboratorij  
work] Laboratorijske i tehnologische uslovija svarki; la-  
boratorijske rukopisi. Novosibirsk, Naukova Dumka, 1974.  
101 p.

EREV'TAN, M.M.; SHEBEKO, L.P.; CHIKUNOV, A.I., inzh., retsenzent;  
KUL'BERG, L.M., retsenzent; CHERNYAK, V.S., inzh., red.

[Economics, organization and planning of welding production]  
Ekonomika, organizatsiia i planirovanie svarochnogo proiz-  
vodstva. Moskva, Izd-vo "Mashinostroenie," 1964. 207 p.  
(MIRA 17:8)

SHEBEKO, N., inzh.

Performance of pumps at low temperatures. Pozh.delo 6 no.10:24~25  
O '60. (MIRA 13:10)  
(Pumping machinery--Cold weather operation)  
(Fire engines)

SHEBEKO, N., starshiy nauchnyy sotrudnik

Wrecker fire truck. Pozh.delo 7 no.6:22 Je '61. (MIRA 14:6)

1. TSentral'nyy nauchno-issledovatel'skiy institut protivozarazhnoy oborony.  
(Fire departments—Equipment and supplies)  
(Motor trucks)

IVANOV, Ye.; SHEBEKO, N.

Hydraulic characteristics of new pumps. Pozh.delo 7 no.12:25-  
26 D '61. (MIRA 14:11)  
(Pumping machinery)

SHEBEKO, N., inzh.

Cart for the haulage of the MP-200 motorpump. Pozh.delo 7 no.7  
26 Jl '61. (MIRA 1c:11)

SHEBEKO, N., inzhener.

Prolonged tests of the PMZ-17 fire engines. Pozh.delo 3 no.2:20  
F '57. (MIRA 10:4)  
(Fire engines--Testing)

SHEBEKO, N., inzhener.

Mobile carbon dioxide charging stations. Pozh.delo 3 no.4:26-27  
Ap '57. (MIRA 10:?)  
(Fire extinction--Chemical systems)

POLUBELOV, V.; SHEBEKO, N.

Experience in operating fire engines in Yakutia. Pozh. delo 4 no.2:19-20  
F '58. (MIRA 11:1)

1. Nachal'nik Otdela protivopozharnoy oborony Yakutskoy ASSR (for  
Polubelov). 2. Starshiy nauchnyy sotrudnik TSentral'nogo nauchno-  
issledovatel'skogo instituta protivopozharnoy oborony (for Shebeko)  
(Yakutia--Fire engines--Cold weather operation)

ANDRUSHKEVICH, B., inzh.; SHEBEKO, N., inzh.

Prolong the life of fire engine bodies. Pozh.delo 4 no. 7:18  
Jl '58. (MIRA 11:8)  
(Fire engines--Maintenance and repair)

SHAROV, N., inzh.; SHEBEKO, N., inzh.

Mechanized tool. Pozh.delo 5 no.12:27-28 D '59.  
(MIRA 13:4)  
(Fire departments--Equipment and supplies)  
(Chain saws)

SHAROV, N.V., inzh., red.; SHEBEKO, N.D., inzh., red.; UCHITEL', I.Z.,  
red.izd-va; SALAZKOV, N.P., tekhn.red.

[Equipment for fire prevention and extinction; catalog-manual]  
Protivopozharnoe oborudovanie; katalog-spravochnik. Moskva,  
Izd-vo M-va kommun.khoz.RSFSR, 1960. 151 p.

(MIRA 13:11)

(Fire extinction--Equipment and supplies)

OZHEREL'YEV, I., inzh.; SHERBEKO, N., inzh.

Level indicators for water tanks. Pozh.delo 6 no.8:26  
(MIRA 13:8)

Ag '60.

(Liquid level indicators)  
(Fire engines)

ACC NR: AP6035753

SOURCE CODE: UR/0413/66/000/019/0124/0124

INVENTOR: Shebeko, N. G.; Lashko, S. V.; Svetlovidov, A. P.; Kamenskaya, Ye. A.;  
Ivanov, Yu. M.; Tikhonova, Ye. B.; Shikh, R. B.

ORG: none

TITLE: Alloy for brazing refractory materials. Class 49, No. 186837

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 124

TOPIC TAGS: refractory metal, ~~refractory metal~~, metal brazing, brazing  
alloy

ABSTRACT: This Author Certificate introduces a niobium-base brazing alloy, containing titanium, and vanadium, for refractory materials. To improve the quality of a brazed joint, the composition of the alloy is set as follows: 20% vanadium, 10—20% titanium and the balance niobium.

SUB CODE: 11, 13/ SUBM DATE: 29Oct64/ ATD PRESS: 5106

Card 1/1

UDC: 621.791.36

VOYTKEVICH, A.A.; BUKHONOVА, A.I.; BERLOVA, Z.D.; GERSHEVITSKAYA, R.T.;  
SHEBKо, O.D.

Effect of adrenaline on regenerative processes in normal and castrated animals. Biul. eksp. biol. med. 47 no.2:124-128 F '59. (MIRA 12:4)

1. Iz kafedry histologii i embriologii (zav. - prof. A.A. Voytkevich) Voronezhskogo meditsinskogo instituta (dir. - prof. N.I. Odnoralov). Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Parinym.

(REGENERATION,  
eff. of epinephrine in normal & castrated animals (Rus))

(CASTRATION, eff.  
on gegen. reactions to epinephrine (Rus))

(EPINEPHRINE, effects,  
on regen. in normal & castrated animals (Rus))

BUKIN, Ye.V. [Buksin, Yu.A.]; KUDRIK, A.S. [Kudrik, S.S.]

Effect of diffusion of the nuclear boundary. Ukr. fiz. zhur.  
9 no.11:1161-1164 N '64. (MIRA 1281)

1. Fiziko-tehnicheskiy institut AN UkrSSR, Khar'kov.

ЧЕБЫХО, В. (Lipetsk).

Carefully carry out local fire technical inspections. Pozh.delo 3  
no.9:4-5 S '57. (MLKA 10:9)  
(Fire prevention--Inspection)

SHEBEKO, V. (Lipetsk)

Using fuel servicing trucks in fire extinction. Posh.delo 4  
no.9:16 Ag '58. (MIRA 11:9)  
(Fire extinction)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548930007-4

REZNICHENKO, P. (Moskva); ABRAMENKO, A. (g. L'vov); BAGDASAROV, A. (Krasnodar).  
ZEOKHOV, V. (Baku); TRACHUK, M. (g. L'vov).; SHEBEKO, V. (Lipetsk).

Our readers' letters. Pozh. delo 5 no.2:31-32 F '59.  
(MIRA 12:3)  
(Fire prevention)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548930007-4"

SHEBEKO, V. (Lipetsk)

Fire on a State farm. Pozh.delo 6 no.12:22 D '60. (MIRA 13:12)  
(Farm buildings--Fires and fire prevention)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548930007-4

A. Kell, A., 2016, M.

Placement of lead-in tubes in a horizontal sweep stage.  
W.L. C.G.S. 1981  
(TMA 14/15C)  
Collimator, Direct, tube - Maintenance and repair)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548930007-4"

PHASE I BOOK EXPLOITATION

613

Shebeko, Vladimir Alekseyevich

Svarka chuguna; proizvodstvennyy opyt vosstanovleniya krupnykh  
detalej mashin svarkoy (Welding of Cast Iron; Field Experience  
in Rehabilitating Large Machine Parts by Means of Welding)  
Moscow, Mashgiz, 1957., 81 p. 8,000 copies printed.

Ed.: Vel'min, A. A., Engineer; Tech. Ed.: Shikin, S. T.;  
Managing Ed. for literature on heavy machine building: Golovin, S.Ya.,  
Engineer.

PURPOSE: This book is intended for welders and shop foremen.

COVERAGE: The book gives various methods for the rehabilitation of  
worn or damaged cast-iron machine parts by means of welding.  
The methods described are those which have been used over a period  
of years by the welders of Stroitel'no-montazhnoye upravleniye  
No. 4 (Construction and Repair Department No. 4) of the

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## Welding of Cast Iron (Cont.)

613

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Welding of Cast Iron (Cont.) 613

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SOV/137-58-11-22575

Translation from: Referativnyy zhurnal Metallurgiya, 1958, Nr 11, p 105 (USSR)

AUTHOR: Shebeko, V. A.

TITLE: Our Cast-iron Welding Experience (Nash opyt svarki chuguna)

PERIODICAL: Tekhn. inform. Metrostroy, 1958, Nr 2, pp 12-16

ABSTRACT: The author summarizes the experience accumulated by the USSR's leading establishments and by the Metrostroy [Moscow Subway Construction Administration] construction and installation administration Nr 4 in the field of cold-arc welding (AW) of cast iron (CI). The employment of Cu welding rods is justified only if a component cannot be repaired by AW methods in combination with heating of the article with steel or CI electrodes or by means of gas welding (GW). Depending on the nature and location of the defect, various AW and GW methods are recommended, together with appropriate welding-rod materials. Cold AW with steel or CI electrodes is permissible only if the defect is located in an area operating in compression. Of particular interest in the case of GW is the employment of welding rods composed of inoculated high-silicon CI containing 3.6-3.8% C and 2.9-3.2% Si. Welds and surfaces built up with this type of

Card 1/2

SOV/137-58-11-22575

Our Cast-iron Welding Experience

CI exhibit a high degree of density and lend themselves readily to machining.

I. V.

Card 2/2

SHEBEKO, V., svarshchik

I prefer propane. Izobr.i rats. no.5:6 My '62. (MIRA 15:5)

1. Stroitel'no-montazhnoye upravleniye No.4 "Metrostroya."  
(Gas welding and cutting) (Propane)

SHEBEKO, Vladimir Alekseyevich; GUROV, S., red.; KUZNETSOVA, A.,  
tekhn. red.

[Propane in place of acetylene] Propan vmesto atsetilena.  
Moskva, Mosk. rabochii, 1963. 60 p. (MIRA 16:5)  
(Gas welding and cutting) (Propane)

SHEBEK, I.A., avarschik

Pay more attention to welders . -var. prefz. no.9:4  
S '64. (MERA 17/12)

I. Stroitel'no-montažnoye upravleniye No.4 Gosudarstvennogo  
ordena Lenina i ordena Trudovogo Krasnogo Znameni upravleniya  
stroitel'stva Moskovskogo metropolitena.

SHEBEKO, V.F., kandidat tekhnicheskikh nauk.

Some data on evaporation and temperature in cultivated and  
virgin swamplands. Trudy Inst.mel.,vod.i bol.khoz.AN BSSR  
6:224-249 '55. (MLRA 9:10)

(Swamps) (Soil moisture)

USSR/Soil Science - Physical and Chemical Properties of Soil.

J-3

Abs Jour : Ref Zhur - Biol., No 5, 1958, 20056

Author : Shebeka, V.F.

Inst : -

Title : The Heat Conductivity of Peat Bog Soils.

Orig Pub : Izv. AN BSSR, ser. biol. n., 1956, No 2, 29-45

Abstract : The virgin peat bog soils of the Belorussian SSR differ from the cultivated soils by their greater thermal conductivity. These soils are heated up faster and give off heat under high moisture conditions. These phenomena slow up at moistures lower than 75% of the total moisture capacity. The following formula is recommended for determining the heat conductivity of virgin peat bog soils:

$$\lambda = (0.75 W - 40) \cdot 10^{-4}, \text{ and for the tilled layer}$$

$\lambda = 3.7 \cdot 10^{-4} \cdot e^{0.02W}$ , where  $\lambda$  is the heat conduction factor in calories / cm . seconds . degrees;  $W$  is the moisture per volume expressed in percentage. Examples of calculations are given.

Card 1/1

✓ H e B E K o , C . E .

314.7) V. A. Uryayev. Hydrology and Hydrometeorology. Institute of Hydrology, Meteorology and Glaciology of the USSR Academy of Sciences, Leningrad, 1957.

Vydatnyy Upravleniye Nauk. 1957. 120 p. 150 p.

Trudy... t. 193. Proceedings of the Conference on the Hydrological and Glaciological Conditions of the Northern Regions of the USSR. Leningrad, 1955.

Uchebnoye i nauchnoye izdatelstvo Akademii Nauk SSSR. 1956. 770 p. 150 p.

Leningrad, Izdatelstvo Akademii Nauk SSSR. 1956. 770 p. 150 p.

2,000 copies printed.

Sponsoring Agency: Glavnaya upravlyayushchayagidrometeorologicheskoy

sluzhby pri Sovete Ministrov SSSR.

Resp. Ed.: V. A. Uryayev; Ed.: V. S. Protopopov; Tech. Ed.: M. I.

Bragtina.

PURPOSE: This work is intended for meteorologists, hydrologists, and hydrophysicists, particularly those engaged in the study of snow and ice, and evaporation processes.

SCOPE: This book contains papers on hydrophysicists which were presented and discussed at the Third All-Union Hydrological Conference in Leningrad, October 1957. The Conference published 10 volumes or, various aspects of hydrology of which this is number 3. The editorial board in charge of the series includes V. A. Uryayev (Chairman), O. A. Alekin, Ye. V. Bliznyak (deceased), O. N. Borodik, N. A. Velikyanov, L. K. Davydov, A. P. Domanskiy, D. P. Kalinin, S. N. Krivtsov, B. I. Kudulin, L. P. Manoil, M. P. Menshikov, B. P. Orlov, I. V. Popov, A. K. Proskuryakov, D. L. Sokolovskiy, O. A. Spengler, A. I. Chernobarev, and S. K. Cherkavskiy. This volume is divided into 2 sections; the first contains reports from the subsections for the study of evaporation processes, and the second contains reports from the snow and ice subsection. References accompany each article.

Budafosov, A.I. [Candidate of Technical Sciences, Institute of Geography, Moscow] Evaporation From the Surface of a Vegetation Cover 125

Pedorenko, S.P. [Candidate of Technical Sciences, VNIGI Valday] Evaporation Under Forest Conditions 131

Kuznetsov, V.I. [Candidate of Technical Sciences, GOI Leningrad] Evaporation From Bodies of Water Affected by Plant Growth 140

Shepelev, V.P. [Candidate of Technical Sciences, "Laboratoriya" NII for Soil Improvement and Water Economy] The Effect of Draining a Swamp on the Evaporation Regimen 148

Pushkarev, V.F. [Candidate of Technical Sciences, GOI Leningrad] The Elements of Hydrological Hydrography 156

Kostylev, M.P. [Candidate of Geographical Sciences, VNIIG "Geofizika"] The Daily Rate of Surface Evaporation From Glaciers and Glaciation Areas 166

Mel'dukhov, G.S. [Meeting of the Evaporation Subsection of the Hydrology of the Section] Methods of Computing the Evaporation Subsection of the Hydrophysics Section 174

Richter, O.D. [Professor, Doctor of Geographical Sciences, Institute of Geography, Moscow] Geography of the Snow Cover in the USSR 202

Shcherbakova, Ye.Ya. [Candidate of Geographical Sciences, GOI Leningrad] Study of the Snow-cover Regimen in the USSR 209

Kur'man, P.P. [Candidate of Geographical Sciences, GOI Leningrad] Methods and Results of Computing the Intensity (Rate) of Snow Melting in European USSR 215

(Y) 220

SHEBEKO, Vassa Fedorovna; BARKAN, V.A., red.; TIMOSHCHUK, R.S.,  
tekhn. red.; ZEN'KO, M.M., tekhn. red.

[Yearly distribution and supply of precipitation in the  
White Russian S.S.R.] Vnutrigodovoe raspredelenie i obes-  
pechennost' osadkov na territorii Belorusskoi SSR; prak-  
ticheskoe posobie. Minsk, Gos.izd-vo sel'khoz.lit-ry  
BSSR, 1962. 142 p. \* (MIRA 15:11)  
(White Russia--Precipitation (Meteorology))

SHEBEKO, Vassa Fedorovna; MISHANOVA, Ye., red.

[Evaporation from bogs and the soil moisture balance]  
Isparenie s bolot i balans pochvennoi vлаги. Minsk,  
Urozhai, 1965. 393 p. (MIRA 19:1)

POLUV'YANOV, G.A., starshiy mashinist; SHUBKO, V.V., mashinist

Recommendations are supported by practical experience.  
Elektroteplovoz 5 no.5:40-41 My '61. (MIRA 14:7)  
(Electric locomotives)

SILKIN, Boris Isaakovich; TROITSKAYA, Valeriya Alekseyevna; SHEBELIN,  
Nikolay Vissarionovich; BELOUSOV, V.V., otv. red.; IORDANSKIY,  
A.D., red. izd-va; LYUBIMOVA, Ye.M., red.izd-va; ASTAF'YEVA,  
G.A., tekhn. red.

[Our unknown planet] Nasha neznakomaia planeta; itogi Mezhdunarodnogo geofizicheskogo goda. Moskva, Izd-vo Akad.nauk SSSR, 1962. 292 p.  
(MIRA 15:12)

1. Chlen-korrespondent Akademii nauk SSSR (for Belousov).  
(Earth)

SHEBENKO, V.A., elektrosvarshchik

The Moscow Subway Construction Administration welds cast iron  
without preheating. Vest.mash.35 no.7:40-41 J1'55.  
(Cast iron--Welding) (MLRA 8:10)

SOV/106-59-2-3/11

AUTHORS: Rodionov, V.M., Strokov, V.N. and Sheberova, R.N.  
TITLE: Remote-control and Monitoring Equipment for Radio-relay  
Lines (Apparatura distantsionnogo upravleniya i kontrolya  
dlya radioreleynykh liniy)

PERIODICAL: Elektrosvyaz', 1959, Nr 2, pp 15 - 23 (USSR)

ABSTRACT: Remotely-controlled and monitored systems for radio-relay lines usually consist of main, manned stations, each of which controls several unmanned, intermediate stations. This article describes one such system developed for the Ministry of Communications. It differs from existing systems in that it uses semi-conductor triodes and cold-cathode thyratrons instead of the usual electronic valves. This reduces the power consumption, increases reliability and simplifies construction.

The system provides for the following possibilities:

- 1) Transmission of 59 "commands" to any of 10 remotely-controlled stations; receipt of a command by the called station is acknowledged by a special "receipt" signal.
- 2) Transmission from any of 10 remotely-serviced stations of a signal indicating a change in the condition of one or more of 64 tele-signalling transducers. The signal

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SOV/106-59-2-3/11

Remote-control and Monitoring Equipment for Radio-relay Lines

contains only information on the station number at which the change occurs; the nature of the change is not encoded.  
3) Transmission from any of the remotely-controlled stations, when requested, of information concerning the condition of each of the 64 tele-signalling transducers, previously mentioned.

Telecontrol Apparatus:

Transmitter - Each command is transmitted in the form of a coded group of three successive ringing tones. Each ringing tone can have one of four frequencies, thereby giving 64 possible code combinations. The code-forming apparatus consists of three semi-conductor oscillators and three thyratrons. The code combination is selected by depression of a knob on the command panel. The circuit is described and the diagram given in Figure 2.

Receiver - The received command is decoded at the remotely-controlled station by a "pyramid" connection of three tiers controlled by a "pyramid" connection of three tiers interconnected in such a manner that ignition of a thyratron in lower tier prepares for firing four thyratrons in the following tier (Figure 2). The first

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Remote-control and Monitoring Equipment for Radio-relay Lines

(lowest) tier contains four thyratrons; the second, four sets of four and the third, 16 sets of four. The thyratrons are ignited by pulses formed from the ringing tones of the coded command by "signal" thyratrons connected via filters to the output of a two-stage semiconductor signal amplifier. To all the thyratrons of the same number in the sets of four is applied the pulse from the corresponding element of the code combination. The result is that, after a command has been received, a relay in the anode circuit of a particular final-tier thyratron is operated. A three-tier pyramid provides 59 final thyratrons for control and 5 for calling. A circuit for restoring the decoder pyramid to its waiting condition (Figure 3) is then described.

Tele-signalling apparatus - The telesignalling apparatus consists of the tele-signalling equipment proper, common emergency equipment and the receipt signalling equipment. Each of the above has a receiving and transmitting section. The transmitting section consists of thyratron circuits connected in such a manner that ignition of each circuit, after a time delay of about 30 milliseconds, triggers the following thyratron. The simplified diagram is given in

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Remote-control and Monitoring Equipment for Radio-relay Lines

Figure 4. The first thyratron is triggered when the station is called. Tele-signalling transducers are connected in the cathodes of the thyratrons and, depending on the condition of the transducer, the thyratron anode pulse operates one or the other of two, different-frequency semiconductor oscillators. The result is that the order of the frequencies in the transmitted pulse train depends on the conditions of the transducers.

The receiver section contains two circuits of transistor amplifiers with filters and signal thyratrons. The circuit forms pulses from the received ringing tones when "Call Tele-signalling" button is pressed. The basic "repeat" of the receiver circuit is a double-circuit, each arm of which contains a pair of thyratrons (Figure 5). From the common cathode resistance of each pair is taken the bias for preparing the following pair. Triggering pulses for the lower thyratrons of each pair come from the signal thyratron of one frequency and for the upper, from the signal thyratron of the other frequency. Thus, the thyratrons ignited in the different pairs depend on the character of the received

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SOV/106-59-2-3/11

Remote-control and Monitoring Equipment for Radio-relay Lines

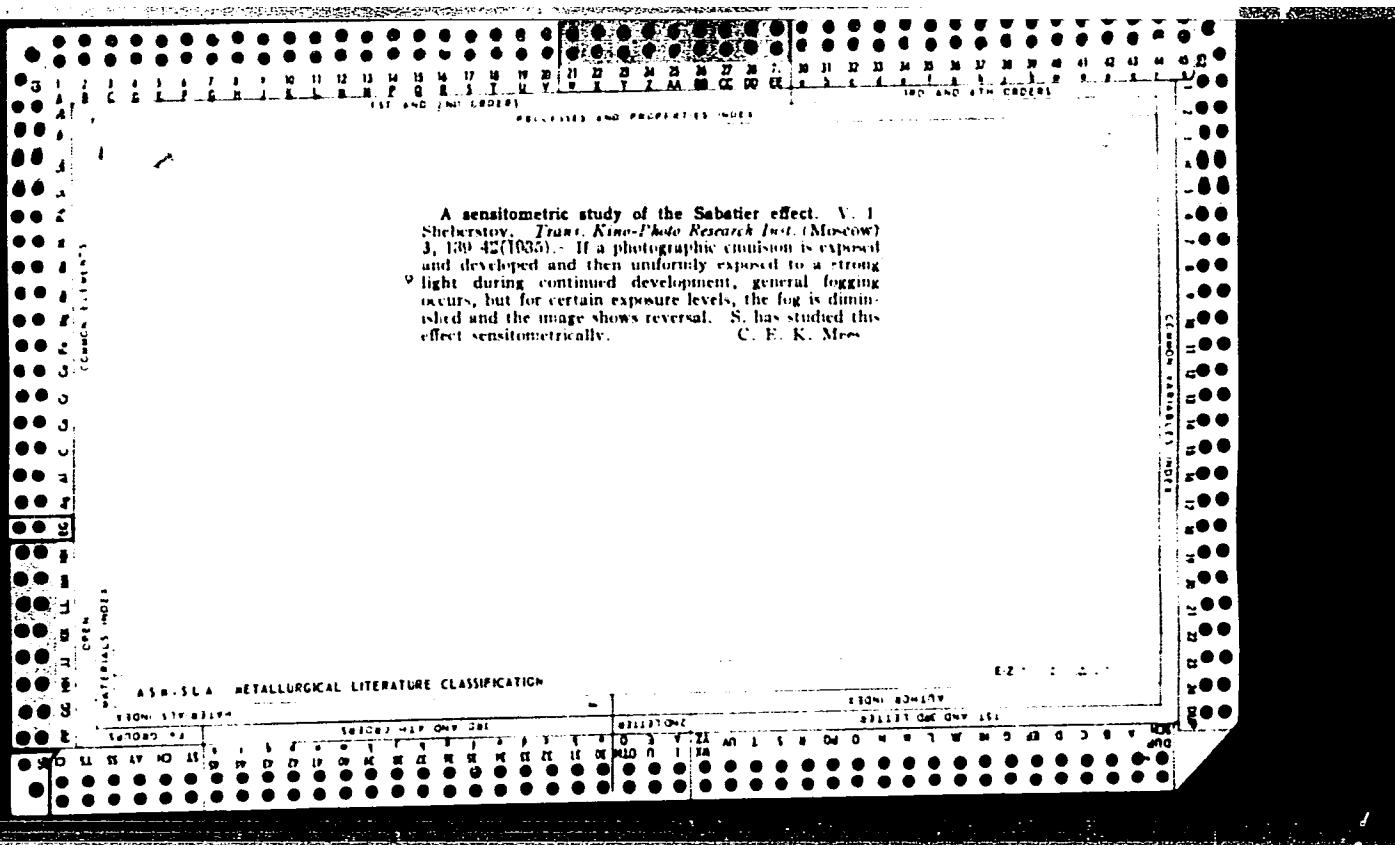
combination. The number of "repeats" of the basic circuit equals the number of signal impulses applied to the receiver.

Finally, the emergency and receipt signal circuits are described. The techniques used are similar to those used in the other parts of the equipment. The circuit of the common emergency signalling transmitter is given in Figure 6; for the emergency receiver, in Figure 7; for the receipt signalling apparatus, in Figure 8.

There are 8 figures and 2 Soviet references.

SUBMITTED: May 29, 1958

Card 5/5



Sensitometric investigation of selective development of blurs. V. I. Shekhter. *Avt. Pate. SSSR*, 1939, No. 1, 130. *Akad. Nauk Zvezd. Akad.* 1939, No. 6, 115. The selectivity ( $U$ ) of the developer is  $K(r, v)$ , where  $r$  is the velocity of development of the image and  $v$  is the velocity of development of fog. The dependence of  $U$  on the nature of the developing substance was investigated on 5 emulsions for 10 developing agents. The componis of the developers were: developing agent 0.05 M,  $\text{Na}_2\text{CO}_3$  25 g.,  $\text{Na}_2\text{SO}_4$  25 g., and water 1 L. The previous results for the highly sensitive emulsions were verified.  $U$  is highest for *p*-aminophenol and lowest for hydroquinone. For slightly sensitive emulsions, anisole produces optimum results. With hydroquinone developer, increase of the concn. of KBr increased the selectivity rapidly at first, then more slowly. Increase of the concn. of KBr above 2 g./L had practically no effect on  $U$ . Increase of temp. decreased the selectivity. W. R. Henn.

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CIA-RDP86-00513R001548930007-4

SHEKINOV, V. I.

"Influence of Mercury Vapors on Photographic Layers," Zhur. Fizh. Fiz., 16, No. 4, 1946.  
Cor., Sci. Rep. Xine-Flute Inst., -1945-.

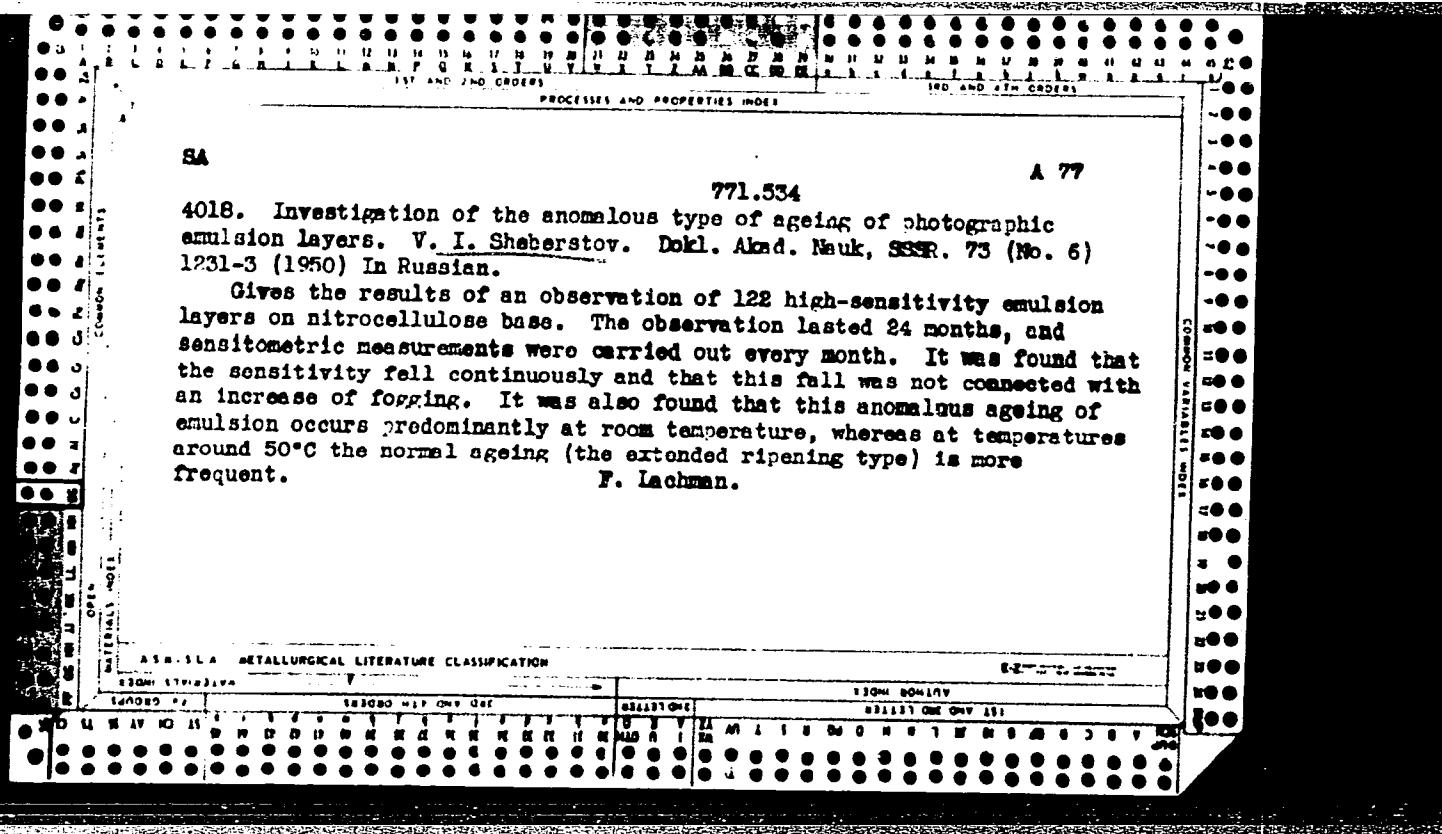
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CIA-RDP86-00513R001548930007-4"

SHIBERSTOV, V.I.; SHIBERSTOVA, G.Ye.

Catalytic action of silver during the oxidation of hydroxyamino-derivatives of benzene. Trudy NIKFI no.7:101-107 '47. (NIRA 11:6)

1. Laboratoriya obrabotki plenki Nauchno-issledovatel'skogo kinofoto-instituta, Moskva.  
(Benzene) (Silver)



Fotografiya i Aerofotografiya (Photography and Aerial Photography), by Docent V. Ya. Mikhaylov, with the assistance of Candidate of Technical Sciences V. I. Sheberstov and Candidate of Technical Sciences G. A. Istomin, Geodezizdat, Moscow, 1952, 372 pp

Presents the elements of photography, sensitometry, and aerial photography. It is suitable as a text for courses in photography and aerial photography given in aerogeodetic institutes.

The book represents a course presented by the author in the Moscow Institute of Engineers of Geodesy, Aerial Photography, and Cartography for students of the aerophotographic-geodetic department.

Covered in the text are the optomechanical elements of photography, photochemistry, the photosensitivity of materials, information on the quality of photographic materials, aerial photography, ground photography, photocopying, the theory and practice of negative and positive processing, and the elements of color photography. Great coverage and detail are given to aerial photography and negative processing.

KATUSHEV, Yakov Matveyevich, professor; SHEBERSTOV, Valentin Iosifovich,  
dotsent; VINOGRADOV, G.A., redaktor; MIL'CHIN, A.E., redaktor;  
CHIGHERIN, A.N., tekhnicheskij redaktor.

[Introduction to the theory of photographic processes] Osnovy  
teorii fotograficheskikh protsessov. Izd. 2-e perer. 1 dop.  
Moskva, Gos. izd-vo "Iskusstvo," 1954. 499 p. [Microfilm]  
(Photographic chemistry) (MIRA 8:2)

SHEBERSTOV, V.I.

Review of the work of Moscow scientists in photographic chemistry.  
Usp.nauch.fot. 2:217-232 '54.  
(MLRA 7:5)  
(Moscow--Photographic chemistry) (Photographic chemistry--Moscow)

SHEBERSTOV, V.I.

USSR/ Chemistry - Photography

Card 1/1 : Pub. 124 - 17/29

Authors : Sheberstov, V. I., Cand. of Chem. Sc.

Title : Treatment of black-white and colored motion picture films

Periodical : Vest. AN SSSR 6, 83-84, June 1954

Abstract : Minutes of meeting held at the Chemical Sciences Branch of the Academy of Sciences, USSR, at which problems of treating black-white and colored motion picture films, were discussed.

Institution : ...

Submitted : ...

V. I. Sheberstov. *Uspekhi Nauch. Fot., Akad. Nauk S.S.R.*, 6A  
*Otdel. Khim. Nauk* 3, 183-94(1955).—The rate equation for a monomol. reaction can be applied to the developing reaction (emulsion org. alkali-sulfite developer) only for low-fogging developers. With high-fogging developers the increase of fog follows a linear equation. The relation of development rate to time was studied. The data are indicative of the formation of activity centers of development and of the autocatalytic character of the development of separate crystals. *Burilla Mayerle*

*photo*  
*was*  
*get*

SHEBERSTOV, V.I.

Relations between the degree of photosensitivity and the contrast  
of photographic layers. Usp.nauch.fot.no.4:44-53 '55. (MLRA 9:4)  
(Photographic sensitometry)

SHEBERSTOV, V. I.

Photo

The relation between light-sensitivity and certain conditions of photographic development. V. I. Sheberstov, Uspekhi Nauk. Fotografiya 4, 210-31 (1955). Light-sensitivity of films depended little on the nature of the developing agent. *p*-Hydroxyphenylglycine, *p*-aminophenol, *p*-

phenylenediamine, and catechol had the same effect. Hydroquinone was less effective. This difference increased with increasing temp. Diln. of developer had practically no effect on the light-sensitivity of films. An increase of KBr in the developer reduced the light-sensitivity of films, but different com. developers were equally effective. Investigated antifogging agents (phenyldiazolethione, mercaptobenzimidazolesulfone acid, 6-nitrobenzimidazole, naphthotriazole, and phenyltriazole) reduced the sensitivity to light, but methyloxytriazaindolizine increased it.

R. S. Lubomirski

✓

✓  
R. S. Lubomirski

SHEBERSTOV, V.I.

10  
Stability of color-photographic images composed of the dyes of color development. I. Levkov, I. M. Fridmann, V. S. Chel'tsov, and V. I. Sheberstov. *Uspekhi Nauch.*

1/6

Fot., Akad. Nauk S.S.R., Otdel. Khim. Nauk 4, 316-26 (1955); cf. Hornsby, Brit. J. Phot. No. 4855, 288 (1953). — Dye images formed in color positive film were kept 3 years at ordinary temps. and humidities, in the light and in the dark. The optical ds. of the magenta (*M*), yellow (*Y*), and cyan (*C*) images in complementary light were measured. The ratios of the observed  $d_t$  to the corresponding initial values ( $D/D_0$ ) are graphed. The films kept in the light were almost completely bleached; for those kept in the dark one year,  $D/D_0$  was 88, 73, and 78% for *M*, *Y*, and *C*, resp. After 3 years, the corresponding values of  $D/D_0$  were 87, 79, and 64%. The later increase in  $d_t$  of the yellow image is ascribed to conversion of some of the cyan dye to brownish yellow substances. Similar color transparencies were kept in O at 20 atm. pressure (I), *in vacuo*, and in N for various times. Results are tabulated. The value of  $D/D_0$  for *C* decreased to 95% after 4 months in I, 87% after 12 months in air, 65% after 12 months in N, and 39% after 12 months in air at 30°; that for (*M* + *Y*) in blue light was 93% after 4 months in air and 114% after 4 months in I; that for (*M* + *Y*) after 12 months in air at 30° (relative humidity 63%) was 167% in blue light and 91% in green; that for (*M* + *Y*) after 12 months *in vacuo* at 30° was 84% in blue light and 86% in green. The loss of  $d_t$  was about the same for film with acetate base as for that with nitrate.

Sh. berst V. V. I.  
Lev Kuz'mi Friedland, M., Chel'tsov, V. S.,

base. In the presence of  $N_2Sf_4$  (0.05 g./sq. m.) values of  $D/D_s$  for  $Y$ ,  $M$ , and  $C$  fell in 3 years to 55, 55, and 20%, resp. In the same way the stability was detd. of cyan images formed with such condensing components as 1-hydroxy-4-sulfo-2-naphthoic acid octadecylamide (II), 1-hydroxy-2-naphthoic acid octadecyl-3,5-dicarboxyphenylamide (III), 1-hydroxy-4-sulfo-2-naphthoic acid octadecyl-(naphthyl)amide (IV), and 1-hydroxy-2-naphthoic acid 2-(methyloctadecylamino)-3-sulfophenylamide (V). After 30 days at 76° (relative humidity 75%) graphed values of  $D/D_s$  for II-V were 40, 59, 95, and 85%, resp. Values of  $D/D_s$  were also detd. for images formed with the phenylamide (VI), the  $\alpha$ -,  $m$ -, and  $p$ -aminophenylamides, the  $\alpha$ -,  $m$ -, and  $p$ -acetamidophenylamides, the 1- and 2-naphthylamides, and the diphenylamide of 1-hydroxy-2-naphthoic acid. For images formed from VI with diethyl- $p$ -phenylenediamine (VII) and diethyl- $p$ -tolylenediamine (VIII) values of  $D/D_s$  after 30 days under the given conditions were 95 and 45%, resp.; for images formed from 1-hydroxy-2-naphthoic acid octadecylamide with VII and VIII they were 60 and 36%, resp.

J. W. Lowenberg, Jr.

2/2  
J.W.L.  
M.M.

SHEBERSTOV, V. I.

"Investigation of the Temperature Coefficients and the Activation Energies of Photographic Development," a paper given at the International Conference on Scientific Photography, 24-27 Sep 1956, Cologne.

E-3072367

LAPAURI, A.A., redaktor; SHEBERSTOV, V.I., redaktor; TELESHEV, A.N.,  
redaktor; MATISSRN, Z.M., tekhnicheskij redaktor

[Concise photographic dictionary] Kratkii fotograficheskii slovar'.  
Pod obshchei red. A.A.Lapauri i V.I.Sheberstova. [Moskva] Gos. izd-vo  
"Iskusstvo," 1956. 385 p.  
(MLRA 10:2)  
(Photography--Dictionaries)

SHEBERSTOV, V.I.

Molecular yield in the reduction of silver bromide by hydroquinone.  
Zhur.nauch. i prikl.fot.i kin. 1 no.1:42-44 Ja-F '56. (MIRA 9:10)

1.Moskovskiy poligraficheskiy institut.  
(Silver bromide) (Photographic chemistry)

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cf. C.A. 51, 41829. — The activation energies of development  
of fog ( $E_f$ ) and image ( $E_i$ ) at 15-26° were detd. of AgBr  
emulsions, some contg. AgI 0-6% and others contg. AgCl  
0-100%, which had been subjected to secondary ripening  
for times from 15 min. to 10 hrs. Results are tabulated.  
As the duration of secondary ripening ( $t$ ) increases,  $E_f$  de-  
creases gradually until it reaches the optimum value ( $t_0$ ) and  
then falls sharply for values of  $t$  greater than  $t_0$ .  $E_f$  de-  
creases as  $t$  increases up to  $t_0$ , then remains const. or slightly  
increases. The value of  $E_f - E_i$  and the selectivity of the  
developer ( $U$ ) are also greatest when  $t$  is equal to  $t_0$ . Both  
 $E_f$  and  $E_i$  are increased in the presence of AgI and decreased  
in that of AgCl. In the presence of excess Br ions,  $E_f$  is  
increased very much more than  $E_i$ . The value of  $U$  can be  
calcd. by the equations:  $\ln U = K + \ln v_f - \ln v_i - K' +$   
 $P_f - P_i + (E_f - E_i)/K'$ , where  $K$ ,  $P_f$ , and  $P_i$  are const.,  
for a given emulsion and  $v_f$  and  $v_i$  are the rates of develop-  
ment of image and fog, resp. J. W. Lowther, Jr.

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C

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